

WATER CUT METER FOR MEASUREMENT OF WATER IN CRUDE OIL - MAGNETIC

ABSTRACT OF THE DISCLOSURE

5

An apparatus, systems, and methods for measuring an amount of oil in a flow of fluid are provided. A housing defines an interior passage configured to pass a flow of fluid, and the housing has a receiving end coupled with an output of a source of the flow of fluid and an output end coupled with a fluid destination. A magnetic source is disposed inside the interior
10 passage and the magnetic source is positioned such that a magnetic field induces an electric current in a conductive portion of the flow of fluid as the flow of fluid passes through the housing. A detector is disposed inside the interior passage between the magnetic source and the output end of the housing and the detector is configured to respond to the electric current induced and generate a signal representative of the amount of oil in the flow of fluid.

